

IN THE SPECIFICATION

Please replace the paragraph beginning at line 11, page 24 with the following Clean Copy:

Referring now to **Figure 6**, details of I2I current source 13 of **Figure 2** are depicted. A shift register 52 receives a data and a clock signal whereby values may be loaded from memory 12 of **Figure 2**. Individual bits clocked into shift register 52 control switches S50A - S50C to couple the gates of switch transistors P51, P53 and P55 to a bias voltage produced by bias generator 54. When a switch is deselected, the gate of the associated transistor is coupled to the power supply rail and no current is switched through that transistor, effectively shutting off the current source. Bias generator 54 is a bias generator designed to provide a reference bias voltage to develop current through transistors P50, P52 and P54 and to provide a cascode voltage reference which when connected ensures that current sources & cascaded devices are properly in saturation over the entire range of operation. Current source transistors P50, P52, and P54 are sized to produce currents corresponding to values increasing in a power-of-two sequence and are coupled to the switch transistors P51, P53, and P55 connected in cascode so that when the bit for a particular current source is in the selected state (logic high), the

(1) *enc* corresponding cascode transistor is connected to its appropriate cascode bias voltage.

Please replace the paragraph beginning at line 11, page 25 with the following Clean Copy:

Since the values of the current sources coupled to the output within I2I current source 13 are set in powers of two, any value may be programmed up to $I_o \cdot (2^N - 1)$, yielding N bits of current resolution. The dashed line connecting current sources within I2I current source capacitor array depict that the number of current sources used in a controller integrated circuit design may be determined by the resolution required for operation of the modulation swing control circuit within the range of laser drive parameters required. Additionally, the current source values within current source 13 may be chosen in increments other than powers-of-two, for example, a greater resolution may be around the lower end of the bias current scale by including more precision near the least significant bit (LSB).

No fee is believed to be required in connection with this addition to the previously-supplied Amendment. However, if there are any fees incurred by this Amendment Letter, please deduct them from our deposit account No. 23-0830.

Respectfully submitted,



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